

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) An arrangement in an information processing system which comprises at least one digital unit which is designed to detect position data on a coded base, the coded base partly being generated from a graphical object which defines graphic information, and at least one processing unit which is designed to receive, from the digital unit, said position data and process said position data according to predetermined rules, each graphical object in the system corresponding to a rule object which is assigned to said at least one processing unit to define said rules, said arrangement comprising:

a storage unit with a first interface for receiving and storing graphical objects, the graphical objects being characterized by graphic information, and a second interface for exposing and reading thus the stored graphical objects; and

an allocation unit which is designed configured to assign on command, from a position data bank, position data for a current graphical object, and to provide in the system allocation data which associates said assigned position data with the current graphical object;

said arrangement allowing, by wherein the second interface of the storage unit, is configured to allow selection of the current graphical object, and providing, by and wherein the allocation unit, provides said assigned position data to a combining module

~~for, and thus allowing application of said graphic information corresponding to the current graphical object and said assigned position data to a substrate for forming [[the]] a coded base.~~

2. (Currently amended) The arrangement system as claimed in claim 1, further comprising a directing unit which is designed to direct, on the basis of said allocation data, said position data from ~~[[the]] a~~ digital unit to a current processing unit among a plurality of processing units in the system, the processing units being configured to receive, from the digital unit, said position data and process said position data according to predetermined rules.

3. (Currently amended) The arrangement system as claimed in claim 2, wherein said allocation data comprises an address identifier which is associated with a network address of said ~~at least one~~ current processing unit.

4. (Currently amended) The arrangement system as claimed in claim 3, wherein the directing unit is designed to receive at least a subset of said position data from the digital unit, identify on the basis of said position data said address identifier for the current processing unit, and send said address identifier to the digital unit.

5. (Currently amended) The arrangement system as claimed in claim 4, wherein the allocation unit is adapted to transfer said address identifier to said directing

unit, preferably in response to an address query from the same directing unit and based on position data included in said address query.

6. (Currently amended) The arrangement system as claimed in claim [[5]] 1, wherein each graphical object is associated with a respective address identifier in the storage unit, and wherein the storage unit which is adapted to transfer to said allocation unit said address identifier for [[the]] a current processing unit, the processing unit being configured to receive, from a digital unit, said position data and process said position data according to a predetermined rule.

7. (Currently amended) The arrangement system as claimed in claim 6, wherein the storage unit is ~~adapted to provide~~ provides said address identifier in connection with the reading of the current associated graphical object through the second interface, and wherein the allocation unit is adapted to receive said address identifier in connection with the allocation of position data for the current graphical object.

8. (Currently amended) The arrangement system as claimed in claim 2, wherein the directing unit is designed to fetch said allocation data from the allocation unit and to send at least a subset of said allocation data to the digital unit-to-be-transferred ~~to the current processing unit~~.

9. (Currently amended) The arrangement system as claimed in claim 2,
wherein the current processing unit is designed to fetch at least a subset of said
allocation data ~~when receiving upon receipt of at least a portion of~~ said position data
from the digital unit.

10. (Currently amended) The arrangement system as claimed in claim 1,
wherein said allocation data comprises an object identifier which is associated with the
current graphical object.

11. (Currently amended) The arrangement system as claimed in claim 10,
~~which allows the further comprising a current processing unit that [[,]] when receiving~~
~~receives said detected position data from said at least one a digital unit, to identify said~~
~~identifies an assigned rule object on the basis of said object identifier, and processes~~
~~said position data according to the assigned rule object.~~

12. (Currently amended) The arrangement system as claimed in claim 10,
wherein each graphical object is assigned to [[an]] a corresponding unique object
~~identifier which is essentially unique in the system.~~

13. (Currently amended) The arrangement system as claimed in claim 12,
wherein ~~all the~~ object identifiers in the system at least are stored in the storage unit.

14. (Currently amended) The arrangement system as claimed in claim 13,
wherein the arrangement second interface of the storage unit allows said selection of
the current graphical object only if the object identifier for [[a]] the selected current
graphical object corresponds to one of the object identifiers stored in the storage unit.

15. (Currently amended) The arrangement system as claimed in claim 10,
wherein the object identifier is incorporated in the associated graphical object.

16. (Currently amended) The arrangement system as claimed in claim 10,
wherein the object identifier is computable based on the graphical object.

17. (Currently amended) The arrangement system as claimed in claim 1,
further comprising a browser unit which is connected to the second interface of the
storage unit, the browser unit including and comprises a display for exposing one or
more of said graphical object objects and a means for selecting the current graphical
object among the one or more of said graphical objects exposed on said display.

18. (Currently amended) The arrangement system as claimed in claim 1, which
is adapted to generate further comprising a generating module for generating the coded
base by printing, on demand, of said graphic information and said position data on said
substrate.

19. (Currently amended) The arrangement system as claimed in claim 1, wherein said position data is incorporated in the coded base in the form of a computer readable position code, which is readable by ~~means of~~ said at least one digital unit.

20. (Currently amended) The arrangement system as claimed in claim 1, wherein the storage unit comprises a format converter which is adapted to convert the graphical object from a first format into a second format.

21. (Currently amended) The arrangement system as claimed in claim 20, wherein the first format is an image file format, such as ~~PNG, JPEG, GIF, TIFF or PDF,~~ and the second format is a print file format, such as ~~Postscript or PCL~~.

22. (Currently amended) The arrangement system as claimed in claim 1, wherein the storage unit comprises a rule object generator which is designed to generate ~~said~~ a rule object from said graphical object, and wherein the storage unit is adapted to provide the ~~thus~~ generated rule object in the system.

23. (Currently amended) An ~~arrangement in an~~ information processing system which ~~comprises digital units which are designed to detect position data on coded bases, each coded base being partly generated from a graphical object which defines graphic information, and a plurality of processing units which are designed to receive, from the digital units, said position data and process said position data according to predetermined rules, said arrangement comprising:~~

an allocation unit which assigns, on command, position data for a current graphical object from a position data bank, and provides ~~in the system~~ allocation data which associates said assigned position data with the current graphical object; [[and]]

a directing unit which directs, on the basis of said allocation data, said position data detected by a ~~from~~ the digital unit to a current processing unit among [[the]] a plurality of processing units in the system, the processing units being configured to receive, from the digital unit, said position data and process said position data according to predetermined rules; and

a combining module ~~said arrangement providing, by the allocation unit, said assigned position data, and thus allowing for application of said graphic information corresponding to the current graphical object and said assigned position data to a substrate for forming one of said a coded bases base.~~

24. (Currently amended) The arrangement system as claimed in claim 23, wherein said allocation data comprises an object identifier which identifies the current graphical object in the system.

25. (Currently amended) The arrangement system as claimed in claim 24, wherein said allocation unit is arranged configured to receive said object identifier with the command to assign position data.

26. (Currently amended) The arrangement system as claimed in claim 24, wherein the directing unit is arranged configured to receive and store an association

between each the object identifier and a network address of one of said processing units.

27. (Currently amended) The arrangement system as claimed in claim 23, wherein said allocation data comprises an instance identifier which identifies the assignment of position data.

28. (Currently amended) The arrangement system as claimed in claim 27, wherein the instance identifier identifies further graphical data which is to be applied to the substrate together with the graphic information, said arrangement the system thereby allowing the current processing unit to access, based on said association data, said further graphical data.

29. (Currently amended) The arrangement system as claimed in claim 27, wherein the instance identifier includes said further graphical data.

30. (Currently amended) An arrangement in an information processing system which comprises digital units which are designed to detect position data on coded bases, each coded base being partly generated from a graphical object which defines graphic information, and a plurality of processing units which are designed to receive, from the digital units, said position data and process said position data according to predetermined rules, said arrangement comprising:

an allocation unit which assigns, on command, position data for [[the]] a current graphical object from a position data bank, and provides ~~in the system~~ allocation data, which associates said assigned position data with a rule object which represents the current graphical object and defines [[the]] predetermined rules for processing the position data;

a combining module ~~said arrangement providing, by the allocation unit, said assigned position data, and thus allowing for application of said graphic information corresponding to the current graphical object and said assigned position data to a substrate for forming one of said a coded base bases; and~~

a processing unit configured to receive detected position data from a digital unit, obtain the rule object upon receipt of the detected position data, and process said detected position data according to said arrangement providing, by the allocation unit, said allocation data, and thus allowing for one of said processing units, upon receipt of said position data, to obtain the rule object.

31. (Currently amended) The arrangement system as claimed in claim 30, further comprising a storage unit which is arranged to receive and store the current graphical object, ~~said arrangement providing, by the storage unit, the current graphical object in the system, and thus allowing for one of said wherein said processing unit is further configured units, upon receipt of said position data, to obtain the current graphical object.~~

32. (Currently amended) The arrangement system as claimed in claim 31, wherein said allocation unit further provides in-said system locating data, which identifies the location of the current graphical object in the storage unit and wherein said processing unit is configured to use, said arrangement providing, by the allocation unit, said locating data, and thus allowing for one of said processing units, upon receipt of said position data, to locate the current graphical object.

33. (Currently amended) An information processing system, which comprises comprising:

at least one digital unit which is designed to detect position data on a coded base;

a processing unit which is designed to receive from the digital unit said position data and process the same position data according to predetermined rules; and an arrangement according to claim 1

a storage unit with a first interface for receiving and storing graphical objects that are characterized by graphic information, and a second interface for reading the stored graphical objects; and

an allocation unit configured to assign on command, from a position data bank, the position data for a current graphical object, and to provide allocation data which associates said assigned position data with the current graphical object;

wherein the second interface of the storage unit is configured to allow selection of the current graphical object, and wherein the allocation unit provides said assigned position data to a combining module for application of graphic information

corresponding to the current graphical object and said assigned position data to a substrate for forming the coded base.

34. (Currently amended) A method of performing, in an information processing system, generation on demand of a position-coded base, said method comprising:

detecting a selection of a current graphical object among a set of graphical objects pre-stored in the system, each graphical object defining including graphic information and corresponding to a rule object which connects at least one measure to the graphic information;

assigning from a position data bank position data for the current graphical object in response to a command;

applying said assigned position data and the graphic information defined by the current graphical object to a substrate for forming said base; and

providing in the system allocation data which associates said assigned position data with the graphical object in such a manner that position data read from the base can be processed using the rule object that corresponds to the current graphical object.

35. (Currently amended) The method as claimed in claim 34, wherein the rule object connects said at least one measure to at least one position in a local coordinate system which is defined relative to a reference point in the graphic information, which and wherein the method further comprises converting said read position data into at least one position in said local coordinate system; and prior to processing the read position data using the rule object.

36. (Currently amended) The method as claimed in claim 35, wherein said assigned position data ~~contains~~ includes at least one position in a set of positions, which is divided into predetermined groups of positions, and wherein the step of converting said read position data is carried out with knowledge of the division of the set of positions.

37. (Original) The method as claimed in claim 35, wherein said allocation data comprises a connection between said assigned position data and at least one corresponding position in said local coordinate system, and wherein the step of converting said read position data is carried out based on said allocation data.

38. (Previously presented) The method as claimed in claim 34, wherein said rule object defines said measures in relation to a position data reference point, which is implicitly connected to the graphic information via a predetermined spatial interrelationship between the graphic information and the assigned position data on said substrate.

39. (Previously presented) The method as claimed in claim 34, wherein said allocation data comprises an address identifier, which is associated with a network address of a processing unit to which said rule object in the system is assigned.

40. (Previously presented) The method as claimed in claim 34, wherein said allocation data comprises an object identifier which is associated with the current graphical object.

41. (Currently amended) A method of enabling, in an information processing system, printing on demand of one or more position-coded bases with graphical information thereon, said graphical information being given by a graphical object which defines a number of physical pages, said method comprising:

defining equal-sized units of a position area, the position area being a portion of a position code using a position code which defines a position area with a predetermined subdivision into units of equal size;

generating, based on the graphical object, a rule object which ~~connects~~
associates at least one measure to at least one position in a local coordinate system which is defined relative to a reference point in ~~anyone~~ any one of said units;

assigning, on command, one unit of the position area for each physical page defined by the graphical object;

providing, in the system, position data for each assigned unit, for use in the printing of said one of more position-coded bases;

generating allocation data which associates the position data of each assigned unit with the rule object; and

providing, in the system, said rule object and said allocation data, for use by a processing unit that receives position data detected on said one or more position-coded bases.

42. (Original) The method as claimed in claim 41, wherein said allocation data allows the processing unit, upon receipt of said position data, to obtain the rule object.

43. (Previously presented) The method as claimed in claim 41, further comprising providing, by a storage unit, the current graphical object in the system, and allowing the processing unit, upon receipt of said position data, to obtain the current graphical object from the storage unit.

44. (Currently amended) The method as claimed in claim [[41]] 43, further comprising providing ~~in-the-system~~ locating data, which identifies the location of the current graphical object in the storage unit, and allowing the processing unit, upon receipt of said position data, to locate the current graphical object.

45. (Currently amended) A method of enabling, in an information processing system, printing on demand of one or more position-coded bases with graphical information thereon, said graphical information being given by included in a graphical object, said system comprising a plurality of processing units which are designed to receive position data detected by digital units on the position-coded bases and to process the received position data according to predetermined rules, said method comprising:

assigning, on command, position data for a current graphical object from a position data bank;

providing said assigned position data in the system, for use in the printing of said one of more position-coded bases;

generating allocation data which associates said assigned position data with the current graphical object; and

directing, on the basis of said allocation data, the position data detected by one of the digital units to a current processing unit among the plurality of processing units in the system.

46. (Original) The method as claimed in claim 45, further comprising receiving, with the command to assign position data, an object identifier which identifies the current graphical object in the system, and including said object identifier in said allocation data.

47. (Original) The method as claimed in claim 46, further comprising storing an association between each object identifier and a network address of one of said processing units, wherein said directing is effected on the basis of said allocation data and said association.

48. (Previously presented) The method as claimed in claim 45, further comprising generating an instance identifier which identifies the assignment of position data, and including said instance identifier in said allocation data.

49. (Currently amended) The method as claimed in claim 48, further comprising associating the instance identifier with ~~further~~ graphical data which is to be included in the base together with the graphic information, thereby making said ~~further~~ graphical data accessible, based on said allocation data, to the current processing unit.

50. (Currently amended) The method as claimed in claim 48, further comprising including said ~~further~~ graphical data in the instance identifier.

51. (New) A system for associating position data with graphical objects on a page, the system comprising:

- a first memory for storing the graphical objects;
- a second memory containing position data to be assigned to at least some of the graphical objects;
- an interface configured to receive a user command selecting from the first memory at least one graphical object to which position data is to be assigned; and
- a processor configured to assign position data from the second memory to the at least one graphical object selected by the user.

52. (New) The system of claim 51, wherein a subset of the graphical objects stored in the first memory constitute a representation of a page of information, and wherein the interface is configured to permit a user to assign position data to at least part of the page of information.

53. (New) The system of claim 52, wherein the subset of the graphical objects representing the page of information initially lack position data, and wherein the interface is configured to permit a user to cause the processor to assign position data to the page of information, wherein the system is further configured to store a link between the page of information and the assigned position data.